

**GEORGE MASON UNIVERSITY  
COLLEGE OF SCIENCE**

**B.S. DEGREE IN BIOLOGY - CONCENTRATION IN Environmental & Conservation Biology  
(1200 Exploratory Hall, 703-993-1050)**

<http://biology.gmu.edu/>  
**2018 - 2019 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b><u>MASON CORE REQUIREMENTS (27)</u></b>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)		_____	_____
b. Oral Communication: COMM 100 or 101 (circle choice) (3)		_____	_____
c. Quantitative Reasoning ( <b>satisfied by completion of major requirements</b> )			
d. Literature (3)		_____	_____
e. Arts (3)	_____	_____	_____
f. Western Civilization (3)	_____	_____	_____
g. Social & Behavioral Science (3)	_____	_____	_____
h. Natural Science ( <b>satisfied by completion of major requirements</b> )			
i. Global Understanding (3)	_____	_____	_____
j. Information Technology ( <b>satisfied by completion of major requirements</b> )			
k. Synthesis (3)	_____	_____	_____

Go to: <http://catalog.gmu.edu/mason-core/> to link to information on Mason Core requirements.

**MAJOR REQUIREMENTS Students must earn a minimum GPA of 2.0 in their Biology course work and a minimum GPA of 2.0 in supporting course work**

<b>a. Twenty-two credits in biology core courses (22)</b>			
1. BIOL 213 (4) (grade of C or better required to advance to other core requirements)		1. _____	_____
2. BIOL 214 (4) (grade of C or better required)		2. _____	_____
3. BIOL 311 (4) (grade of C or better required)		3. _____	_____
4. BIOL 308 (writing intensive course) (5) (grade of C or better required)		4. _____	_____
5. BIOL 310 (3) and BIOL 330 (2) (grade of C or better required)		5. _____	_____
<b>b. Environmental and Conservation Biology Concentration Courses (16)</b>			
1. BIOL 318 (3)		1. _____	_____
2. BIOL 377 (3)		2. _____	_____
<b>c. Sixteen credits chosen from: BIOL 309 (3), 314 (4), 326 (3), 331 (4), 332 (4), 344 (4), 345 (4), 350 (4), 355 (4), 379 (4), 440 (4), 446 (3), 449 (3), 450 (3), 454 (3), 455 (1), 457 (3), 459 (3), 468 (4), 472/473 (3/1), 480 (3)</b>			
<b>d. Eighteen credits of chemistry (18)</b>			
1. CHEM 211, CHEM 212 (4,4)		1. _____	_____
2. CHEM 313, CHEM 315 (3,2)		2. _____	_____
3. <b>One of the following options: A:</b> CHEM 314 & CHEM 318 (please circle choice) (3,2) <b>OR B.</b> GEOL 101 and GEOL 102 (4,4) <b>OR C.</b> One additional three-credit chemistry course at the 300- or 400-level (not CHEM 314)			
e. PHYS 243/244 and PHYS 245/246 or PHYS 160/161 and PHYS 260/261 (3/1, 3/1)		e. _____	_____
f. <b>One course from (circle choice):</b> MATH 111(3) <b>or</b> MATH 113 (4) <b>or</b> MATH 123 & 124 (3,3)		f. _____	_____
g. <b>CDS 130</b> (recommended) or any course(s) that fulfills the IT Mason Core requirement (3)		g. _____	_____

**NOTES:.** No more than eight credits of BIOL 103 or 106/107 may be applied toward elective credit (or equivalent transfer credit at the 100-200 level) if taken before successful completion of BIOL 213. Students may not count BIOL 124 and/or 125 toward any Biology major requirement, Students who take BIOL 310 may not count BIOL 303 and/or 304 toward any Biology major requirement.

**GENERAL ELECTIVES:** Maximum 2 credits of PHED, PRLS, and RECR coursework toward a COS degree. Only MLSC 400 and MLSC 402 may be used for credit towards a COS degree. (List courses)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**MINIMUM 120 HOURS (including Minimum 45 UPPER DIVISION HOURS) to GRADUATE**

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2018-2019 Catalog; the University Catalog is the official reference for program requirements.

## B.S. Biology

2018 - 2019

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
BIOL 213	4	BIOL 310	3	*Math Req =
CHEM 211	3	BIOL 330	2	MATH 111, 113 or
CHEM 213	1	MATH Req*	3 or 4	123/124 (two
Mason Core	3	CHEM 212	3	semesters).
Mason Core	3	CHEM 214	1	*BIOL 214 can be
UNIV 100	1	Mason Core	3	taken with 213 in
Total:	15 credits	Total:	15 or 16 credits	first semester.
FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
BIOL 214	4	BIOL 311	4	*CHEM 314/318 can
Mason Core	3	Mason Core	3	Be replaced by GEOL
CHEM 313	3	CHEM 314*	3	101 (4) and GEOL 102
CHEM 315	2	CHEM 318*	2	(4) OR and additional
Mason Core	3	Mason Core	3	3 credit upper-level
Total:	15 credits	Total:	15 credits	CHEM course (not 314)
FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
BIOL 318	3	BIOL 377	3	*PHYS requirement
PHYS Lecture*	3	PHYS Lecture*	3	can be fulfilled by the
PHYS Lab	1	PHYS Lab	1	following sequences:
Additional BIOL Req.*	3 or 4	Additional BIOL Req.*	3 or 4	PHYS 160/161 and 260/ 261 OR PHYS 243/244
CDS 130	3	General Elective	3	and 245/246.
Total:	15 or 16 credits	Total:	13 or 14 credits	
FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
BIOL 308	5	Synthesis	3	*Additional BIOL Req.
General Elective	3	General Elective	3	courses are listed
ENGH 302	3	General Elective	3	on page 2.
Additional BIOL Req.*	3 or 4	Additional BIOL Req.*	3 or 4	
		General Elective	1	
Total:	14 or 15 credits	Total:	13 or 14 credits	

\*THIS IS A SAMPLE PLAN. BECAUSE THE SEMESTERS WHEN CONCENTRATION REQUIREMENTS ARE OFFERED CAN VARY, IT IS BEST TO MAKE AN INDIVIDUAL DEGREE PLAN WITH A BIOLOGY ADVISOR.

\*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+).

\*Sixteen additional BIOL credits must be chosen from: BIOL 309 (3), BIOL 314 (4), BIOL 326 (3), BIOL 331 (4), BIOL 332 (4), BIOL 344 (4), BIOL 345 (4), BIOL 350 (4), BIOL 355 (4), BIOL 379 (4), BIOL 440 (4), BIOL 446 (3), BIOL 449 (3), BIOL 450 (3), BIOL 454 (3), BIOL 455 (1), BIOL 457 (3), BIOL 459 (3), BIOL 468 (4), BIOL 472/473 (3 and 1), BIOL 480 (3).